

### **Dorchester Avenue Bridge Replacement**

Virtual Public Meeting

March 25, 2021

Karl Eckstrom, Senior Project Manager, MBTA Capital Delivery

Kristofer Kretsch, Project Manager, MBTA Capital Delivery

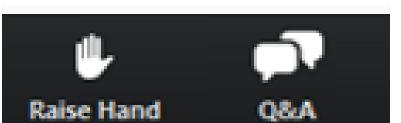
# Notification of Recording and Q&A Best Practices

### Notification of Recording

- This meeting will be recorded, and the recording and chat transcript are considered a
  public record
- This meeting recording will be posted on the project website following the conclusion of the meeting

### **Q&A** after the Presentation

- Please share only one question or comment at a time
- Use the Q&A button at the bottom of your screen to submit a typed question or comment
- Press the RAISE HAND button to share your question or comment verbally. Wait for the moderator to recognize you and unmute you before speaking



# Agenda

- Project Overview
- Existing Conditions
- Von Hillern Street Retaining Wall Repair
- Bridge Replacement Project
- Construction Staging
- Anticipated Construction Schedule
- Next Steps
- Public Outreach
- Questions/Comments



# **Project Overview**

### **Background:**

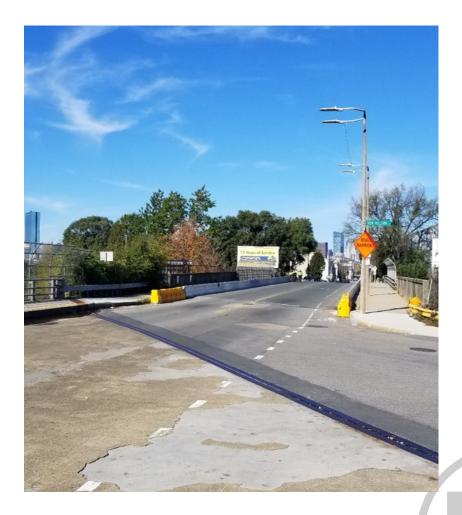
- Originally built in 1925, and last rehabilitated in 1975
- The steel bridge carries vehicles, pedestrians, and bicyclists over the Red Line as well as the Old Colony Commuter Rail and Cabot Yard maintenance tracks

### Project Scope:

- Full replacement of the bridge and the Red Line tunnel roof
- Preservation of the adjacent Von Hillern Street wall (McMillen Jacobs Associates)
- Bridge will be closed for approximately 4 months, during Stage 4 Summer 2022.

### Project Benefits:

- Safer, more resilient and reliable service of the bridge as well as the Red Line that travels below
- Reduced future maintenance costs and service impacts



## **Project Site – Location**



Aerial view of the bridge location



Close up view of the Dorchester Ave. Bridge

# **Existing Conditions**



Red Line Track - East Elevation Von Hillern Street Retaining Wall on the left

Old Colony Track - West Elevation

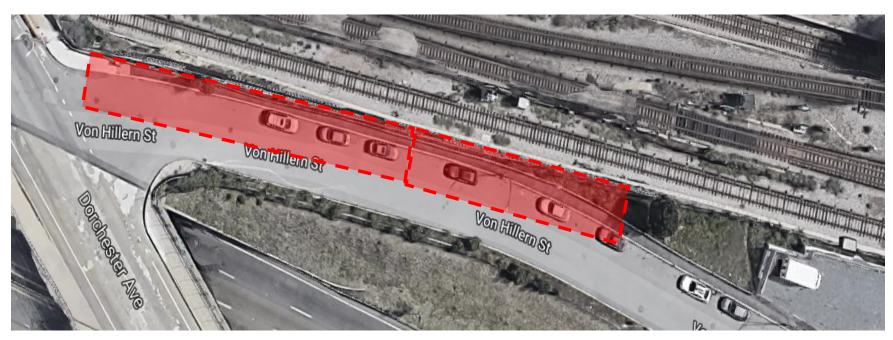
Old Colony Track - East Elevation



Von Hillern Street Retaining Wall Repairs

# Von Hillern Street Retaining Wall Repair

- Von Hillern Street retaining will be rehabilitated to maintain it's structural integrity
- Work is scheduled to be done prior to bridge replacement: Summer 2021
- A travel lane and parking on Von Hillern Street will be required by the Contractor to perform drilling work from above
- Police details will on site to manage traffic impacts



**Temporary Construction Area** 



### Von Hillern Street Retaining Wall Repair



19-ft work zone needed Temporary removal of from top of wall fence and guardrail 12-ft traffic lane provided REMOVE TOP 9'-0" TO 14'-0" 6'-3"± +/- OF WALL ACING BETWEEN COLLIMN KIST. FENCE & GUARDRAIL - € VON HILLERN ST REPLACE AS ,REO'D FACING DETAILS WALL TOP DETAIL ON PLAN NO. 107 3"E 3'-0"±. DMH (BEYOND NAIL ROW , Fence TELECOM MH 1.5' +/-SOIL NAIL L 20"G -16"W EXIST. TRACK EXIST. TRACK **Crane Mats** 24' +/-YP UON - ELECT. DUCT BANK #10 SOIL NAIL (6" DIA. DRILLED HOLE), TYP. SEE NOTE 32'+/-EXIST. UTILITY TO BE SHIFTED AS REQ'D TOWARDS TRACK TOE DRAIN, SEE € BORING B-1 PLAN NO. 106

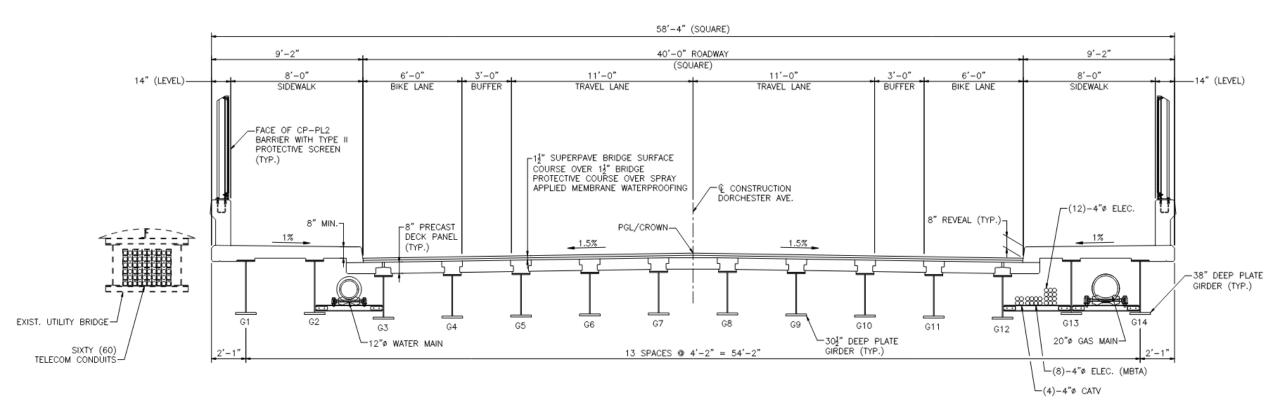
**Construction View of Retaining Wall** 

Picture of a similar drill rig that will be used for this work



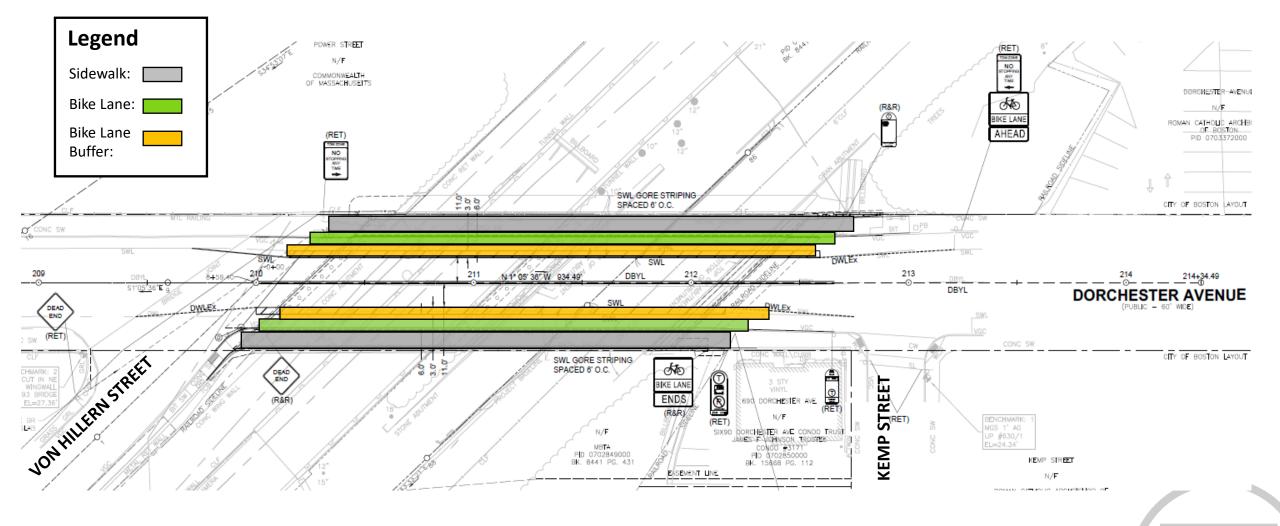
### Bridge Replacement Project

## **Proposed Bridge**



- Steel plate girders, precast deck panels, CIP closure pours, sidewalk and barrier
- 40-ft roadway width (matches existing on bridge), 8'-0" sidewalk width. Includes bike lanes with buffer
- Vaulted sidewalk: vertical clearance and increased structure depth for utilities
- Relocate existing gas line

### Proposed Bridge: Pavement Marking Plan

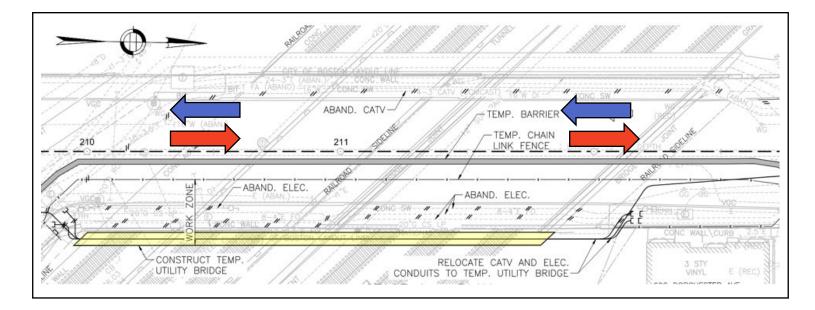


Pavement Marking Plan

# Construction Staging – Stages 1 & 2

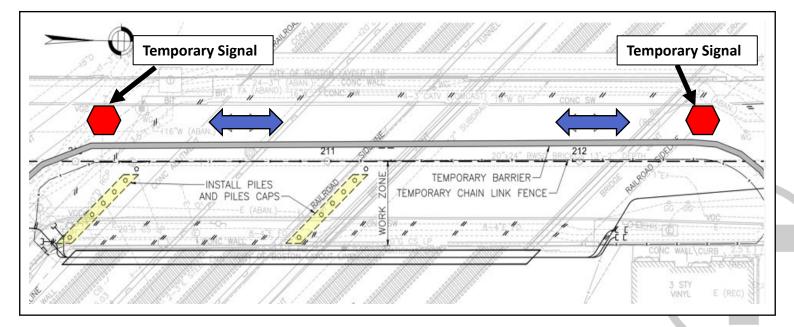
#### Stage 1 – Utility Relocation

- Traffic Impacts:
  - Two lanes, western sidewalk open, and eastern walkway provided
- Anticipated to take place Spring 2022
- No impact to Red Line or Commuter Rail service



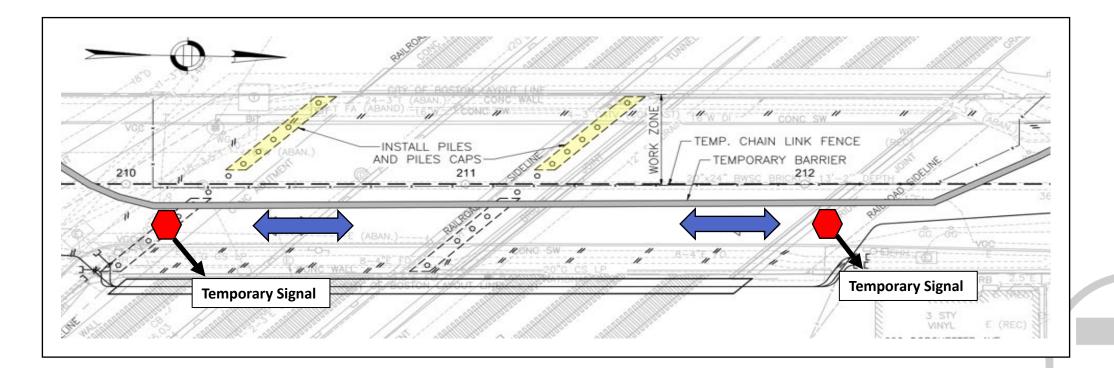
#### Stage 2 – Pile Installation

- Traffic Impacts:
  - Single lane alternating with temp. signals, western sidewalk open, eastern walkway provided
- Anticipated to take place late Spring 2022
- No impact to Red Line or Commuter Rail service



#### **Stage 3 – Pile Installation**

- Traffic Impacts:
  - Single lane alternating with temp. signals, western sidewalk open, eastern walkway provided
- Anticipated to take place Early Summer 2022
- No impact to Red Line or Commuter Rail Service

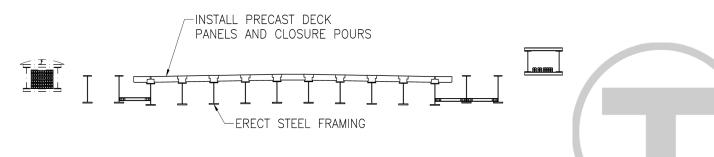


# Construction Staging – Stage 4

#### Stage 4 – Bridge Closure

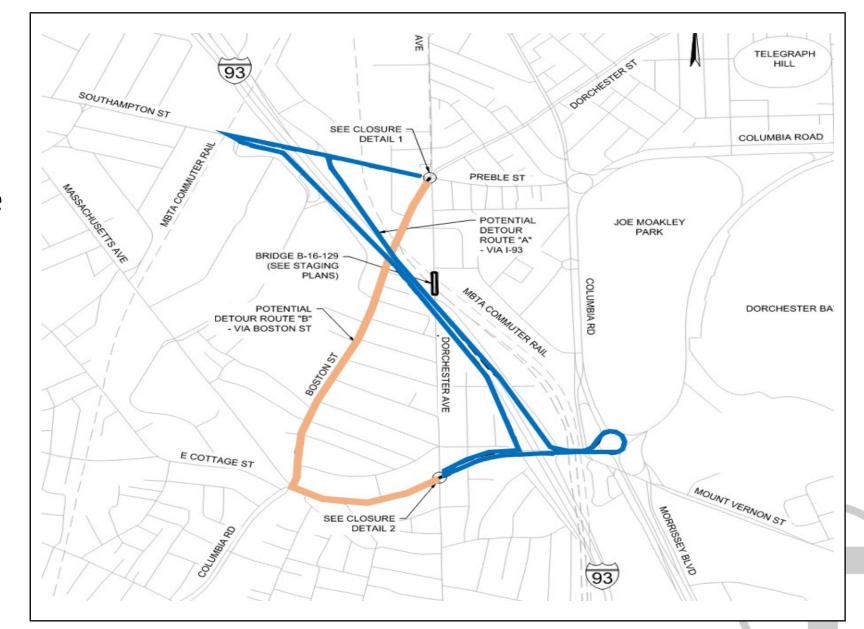
- Traffic Impacts:
  - Full Bridge Closure
  - Vehicular and Pedestrian Detours
- Anticipated to take place Summer 2022
- Demolish existing bridge superstructure & partial substructure
- Erect steel framing and deck panels, complete deck closure pours, install precast approach slabs, backfill and pave approaches for partial reopening
- Red Line/Commuter Rail Impacts:
  - Weekend Diversions





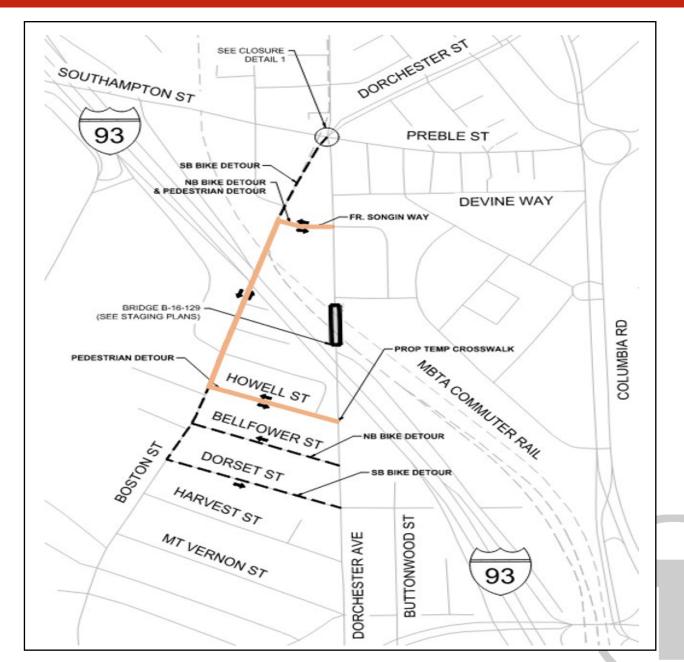
# Bridge Closure – Vehicular Detour

- Detour will be in employed during Stage 4 bridge closure
- Detour route encouraged during Stages 1-3 & 5



# Bridge Closure – Pedestrian Detour

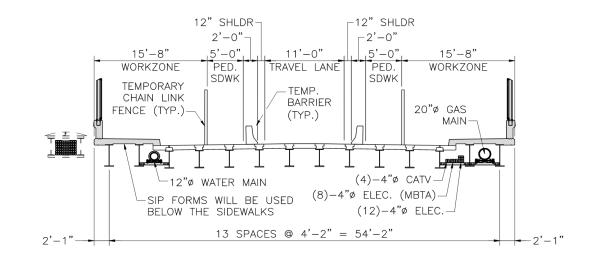
- Pedestrian detour will be employed during Stage 4 bridge closure
- Pedestrian access over bridge will be maintained during Stages 1-3 & 5

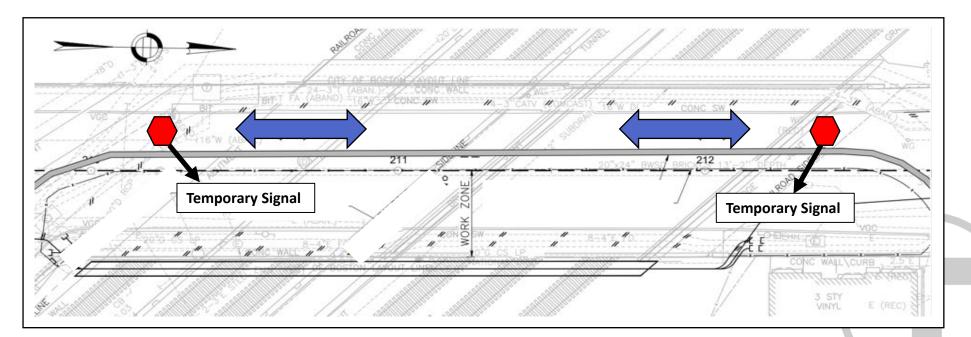


# Construction Staging – Stage 5

### Stage 5 – Bridge Construction & Utility Relocation

- Bridge will partially reopen
- Traffic Impacts:
  - Single lane alternating
  - Pedestrian walkways will be open partially
- Anticipated to take place Fall 2022
- No impact to Red Line/Commuter Rail service





*Traffic Plan (right): Single lane alternating. Sidewalks partially open* 

### **Anticipated Construction Schedule**

	Summer 2021	Fall - Winter 2021	Early Winter 2022	Spring 2022	Summer 2022	Fall 2022
Von Hillern Street Retaining Wall Repairs						
Bridge Replacement Procurement Phase						
<b>Stages 1-3:</b> Utility Relocation/Pile Installation					•	
<b>Stage 4: Bridge Closure.</b> Demo of existing structure						
<b>Stage 5:</b> Bridge Construction & Utility Relocation (Bridge partially reopen)						
Stage 6: Demobilization						-

\*Construction phasing subject to change

## Next Steps

- Design progression to 75% and 100%
- Complete Design Public Meeting Fall of 2021
- Preconstruction Public Meeting Early 2022
- Continued Municipal & Stakeholder Engagement throughout the design progress



## **Public Outreach**

#### Visit the project webpage: mbta.com/DotAveBridge

- Public and Stakeholders can sign up to receive digital updates on the project via the project email address
- Upcoming Virtual Public Meetings at Complete
   Design and Preconstruction
- Construction Advisories will be sent out prior to any significant work scheduled (bridge closure, nighttime, weekend work, etc.)

Project Email: <a href="mailto:DotAveBridge@mbta.com">DotAveBridge@mbta.com</a>

Massachusetts Bay

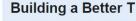
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#### **Dorchester Avenue Bridge Replacement**



Design is underway to replace the Dorchester Avenue Bridge, located between Von Hillern Street and Kemp Street. The steel



As part of our \$8 billion, 5-year capital investment plan, we're renovating stations, modernizing fare collection systems, upgrading services for our buses, subways, and ferries, and improving the accessibility of the entire system.

Learn more



Dorchester Ave. Bridge Replacement Construction Advisory: Bridge Closure

> information on this project and to or email updates please visit:

The MBTA	For more				
the bridge a	sign up fo				
				~~~~	www.ME

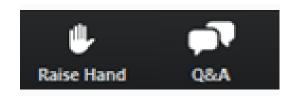
Construction ∧ Advisory Flyer

Project Webpage

### Questions & Answers

Visit the project website and sign up for updates and construction information: <u>www.mbta.com/DotAveBridge</u>





#### <u>Q&A</u>

- Please share only one question or comment at a time.
- Use the "**Q&A**" button to submit a typed question or comment.
- Press the "**Raise Hand**" button to share your question or comment verbally.
- To ask a question via phone, dial \*9 and the moderator will call out the last 4 digits of your phone number and unmute your audio when it is your turn.



### Thank You!